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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,517	03/30/2004	Kent Allan Franklin	KCC-15,622.1	6134

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EXAMINER

TAWFIK, SAMEH

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/813,517	<b>Applicant(s)</b> FRANKLIN ET AL.	
	<b>Examiner</b> Sameh H. Tawfik	<b>Art Unit</b> 3721	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,8-20 and 26-44 is/are pending in the application.
- 4a) Of the above claim(s) 30-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-20 and 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maxton et al. (U.S. Patent No. 6,497,032) in view of applicants Background Of The Invention.

Maxton discloses a method of tucking a pair of opposing side panels onto a body portion of a pant-like garment, comprising the steps of positioning the body portion of the pant-like garment on a conveyor having a vacuum zone (Figs. 2, 10 and 11; via vacuum box 234); holding the body portion on the conveyor using vacuum force from the vacuum zone; and using a mechanical tucking device that is separate from the conveyor to push the opposing side panels onto the body portion a distance toward one another while the vacuum force is holding the body portion on the conveyor (Figs. 10 and 11; via folding apparatus 250); note that the folding apparatus 210 can be mounted on the entry conveyor 208, the support structure 240, partially or fully on the main folding drum 212, or the like (column 24, lines 26-29), creating longitudinal folds in the garment along outer longitudinal edges of the vacuum zone (Figs. 2, 10, and 11).

Maxton does not disclose that the mechanical tucking device includes two opposing assemblies including “tucking blade on a rotary paddle or at least one tucking blade conveyed along a track that guides the at least one tucking blade a distance alongside the conveyor.

However, applicants admitted that such use of tucking a pair of opposing side panels onto a body portion comprising mechanical tucking device includes two opposing assemblies including “tucking blade on a rotary paddle or at least one tucking blade conveyed along a track that guides the at least one tucking blade a distance alongside the conveyor, see for example the filed specification (page 2, lines 20-22).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted Maxton’s tucking device 210 and 250 by using rotary paddle or conveyed tucking blades, as suggested and known by the prior art, as a matter of engineering design choice, in order to speed up the process of pushing the opposing side panels of the garments.

Regarding claim 4: Maxton discloses that wherein the vacuum zone comprises a uniform vacuum across a transverse width of the vacuum zone (Fig. 10; via using same vacuum box 234).

Regarding claim 5: Maxton discloses that wherein the vacuum zone has a transverse width about equal to a desired folded transverse width of the body portion of the garment (Figs. 10 and 11).

Regarding claim 7: Maxton discloses that further comprising the step of using a mechanical tucking device to push the opposing side panels onto the body portion toward one another (Figs. 10 and 11).

Regarding claim 8: Maxton discloses that wherein the longitudinal folds are created in the body portion of the pant-like garment (Figs. 10 and 11).

Regarding claim 9: Maxton discloses that wherein the longitudinal folds are created along seams joining the side panels to the body portion (Figs. 10 and 11).

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Regarding claim 10: Maxton discloses that wherein a portion of at least two of the opposing side panels is held onto the vacuum zone, and a longitudinal fold is created in each of the at least two opposing side panels (Figs. 10 and 11).

Regarding claims 11-13: Maxton discloses that wherein the pant-like garment comprises a training pant, swim-pant, and/or has un-bonded side panels (Fig. 4 and column 4, lines 46-48).

Claims 14-20, 23, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westphal et al. (U.S. Patent No. 4,739,910) in view of applicants Background Of The Invention.

Westphal discloses a method and an apparatus of tucking a pair of opposing side panels onto a body portion of a pant-like garment comprising the steps of positioning the body portion of the pant-like garment on a conveyor having a vacuum zone (Fig. 1; upper and lower conveyors and via vacuum sources 122); holding the body portion on the conveyor using vacuum force from the vacuum zone (Fig. 2; via the body of the garments 12); and a mechanical tucking device that is separate from the at least one conveyor (Fig. 1) for pushing the opposing side panels onto the body portion a distance toward one another, creating longitudinal folds in the garment along outer longitudinal edges of the vacuum zone (Figs. 10-12 and column 7, lines 65-68).

Westphal does not disclose that the mechanical tucking device includes two opposing assemblies including “a rotary paddle or at least one tucking blade conveyed along a track that guides the at least one tucking blade a distance alongside the conveyor.

However, applicants admitted that such use of tucking a pair of opposing side panels onto a body portion comprising mechanical tucking device includes two opposing assemblies including “tucking blade on a rotary paddle or at least one tucking blade conveyed along a track that guides the at least one tucking blade a distance alongside the conveyor, see for example the filed specification (page 2, lines 20-22).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted Maxton’s tucking device 210 and 250 by using rotary paddle or conveyed tucking blades, as suggested and known by the prior art, as a matter of engineering design choice, in order to speed up the process of pushing the opposing side panels of the garments.

Regarding claims 15 and 16: Westphal discloses that wherein the vacuum zone comprises an outer area adjacent each of the outer longitudinal edges, the outer areas each having a first vacuum, and an inner area between the outer areas, the inner area having a second vacuum lower/higher than the first vacuum (Fig. 2; via vacuum compartments 128, 130, and 132; and column 5, lines 51-62).

Regarding claim 17: Westphal discloses that wherein the vacuum zone comprises a uniform vacuum across a transverse width of the vacuum zone (Fig. 1; via across the transverse of each compartment same vacuum source).

Regarding claim 19: Westphal discloses that an upper conveyor having an upper vacuum zone and a lower conveyor having a lower vacuum zone (Figs. 1 and 2; via 122).

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Regarding claim 20: wherein the upper conveyor and the lower conveyor diverge from one another and then converge toward one another along a machine direction path of the conveyor (Figs. 1 and 2).

Regarding claim 23: Westphal discloses that wherein the device for pushing the side panels onto the body portion comprises a vacuum (Fig. 2; via vacuum conveyor belts help on the folding step; column 7, lines 65-68).

Regarding claim 25: Westphal discloses that wherein the device for pushing the side panels onto the body portion comprises two opposing assemblies, each assembly including at least one tucking blade on a track that guides the at least one tucking blade a distance alongside the at least one conveyor (Fig. 10; via blade 176).

Regarding claim 26: Westphal discloses that wherein the track of each of the assemblies maintains the at least one tucking blade essentially parallel to the pant-like garment (Figs. 10-12).

Regarding claim 27: Westphal discloses that wherein the track of each of the assemblies travels essentially parallel to the at least one conveyor and above the at least one conveyor (Figs. 1 and 2; via above conveyor 74).

Regarding claim 28: Westphal discloses that wherein the track of each of the assemblies travels essentially parallel to the at least one conveyor and below the at least one conveyor (Figs. 1 and 2; via below conveyor 96).

Regarding claims 24 and 29: Westphal does not disclose a pushing assembly including at least one tucking blade on a rotary paddle. However, westphal disclose in Figs. 10-12 using pushing means 148 and 152, which is equivalent to the pushing tucking blade.

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted Westphal's pushing means 148 and 152, by using tucking pushing including tucking blade on a rotary paddle as a matter of engineering design choice, in order to simplify the apparatus.

Regarding claim 29: Westphal neither disclose a driven stacker assembly having at least two stacker finger units. However, the examiner takes an official notice that the mentioned driven stacker assembly having at least two stacker finger units is old, well known, and available in the art to stack group of products.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Westphal's apparatus by having driven stacker assembly having at least two stacker finger units, in order to stack group of products as they come out of the apparatus.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maxton et al. (6,497,032) in view of Westphal et al. (4,739,910).

Maxton does not disclose that a vacuum zone comprises an outer area adjacent each of the outer longitudinal edges, the outer areas each having a first vacuum, and an inner area between the outer areas, the inner area having a second vacuum lower than the first vacuum. However, Westphal discloses a similar method comprising different vacuum zones with different vacuum force (Fig. 2; via 128, 130, and 132; column 5, lines 51-62).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Maxton's vacuum box, by using different vacuum zone



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and different force, as suggested by Westphal, in order to fold and manufacture child's training pant or the like in an efficient and less-costly manner (column 1, lines 62-63).

Claim 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westphal et al. (4,739,910) in view of Kober (5,300,007).

Westphal does not disclose the step of using a pair of fluid streams to push the opposing side panels onto the body portion toward one another. However, Kober discloses using a fluid streams for folding a segment (Figs. 1-3) to simply control the folding process.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted Westphal's folding pusher and arms as shown in Figs. 10-12 by using fluid streams, as suggested by Kober, in order to use less mechanical parts and as a result occupying a minimum of valuable floor space (column 2, lines 8-10).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-5, 8-20, and 26-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470. The examiner can normally be reached on Tuesday - Friday from 8:00 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sameh H. Tawfik  
Primary Examiner  
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A handwritten signature in black ink, appearing to read 'Sameh', followed by a long, sweeping horizontal line that curves upwards at the end.

ST.